

Opinion of the Court.

BEIDLER v. UNITED STATES.

APPEAL FROM THE COURT OF CLAIMS.

No. 260. Argued April 27, 28, 1920.—Decided June 7, 1920.

Patent No. 1,057,397, granted to George C. Beidler, March 25, 1913, for an improvement in photographing and developing apparatus, does not contain a description of the claimed discovery adequate to render it useful, and is therefore invalid for failure to disclose a practical invention.

53 Ct. Clms. 636, affirmed.

THE case is stated in the opinion.

Mr. Charles J. Williamson, with whom *Mr. Frank S. Appleman* was on the briefs, for appellant.

Mr. Daniel L. Morris, Special Assistant to the Attorney General, with whom *Mr. Assistant Attorney General Davis* and *Mr. Edward G. Curtis*, Special Assistant to the Attorney General, were on the brief, for the United States.

MR. JUSTICE CLARKE delivered the opinion of the court.

This is a suit to recover damages for the infringement of five of the forty-one claims of Letters Patent No. 1,057,397, applied for March 23, 1907, and granted on March 25, 1913.

The specification describes the claimed invention as an Improvement in Photographing and Developing Apparatus, and as designed primarily for reproducing writings, drawings, pictures or the like,—“novel means being also provided to convey the sensitized film through a series of receptacles containing suitable developing and fixing fluids or through suitable baths according to the requirements.”

The patent is for a machine made up of a combination of elements all of which were old, to produce a result which was old but by a method of co-ordination and operation which it is claimed is new and useful. The invention is declared in the specification to consist in "the details of construction and in the arrangement and combination of the parts," as "set forth and claimed" by the inventor.

Figure 1 of the drawings, forming a part of the specification, will aid in explaining the construction and function of the invention as claimed and in determining the character and extent of the disclosures of the patent. [See p. 449.]

The described mode of operation is substantially as follows:

W is a roll of sensitized paper or film placed immediately below the exposure chamber F of a camera, with its sensitized surface uppermost to receive the desired image, reflected from the mirror H. This film is fed into the chamber between the rollers b, and thence along the floor thereof to the rollers D where it emerges from the camera and is seized by "clips" or clamps N. These clamps are supported and carried by a rack M, and may be moved to and fro (reciprocated) by turning the pinions L on the shaft K, by means of a crank.

I, J and J' are shallow pans or "tanks" in which suitable "developing," "fixing," and "washing" solutions or fluids are placed and the whole of the construction to the right of the camera, as we face the print, is enclosed in a light-proof case E, referred to in the patent sometimes as a "compartment" and sometimes as a "chamber." The rack M, and the clamps which hold and support the film, move above the tanks and necessarily above the level of the liquid within them. By turning the pinion L, the rack M is moved outwardly away from the camera, and the clamps draw the film after them until the required length is attained, when it is severed from the roll by a manually operated cutter, O. When the film is thus cut to the

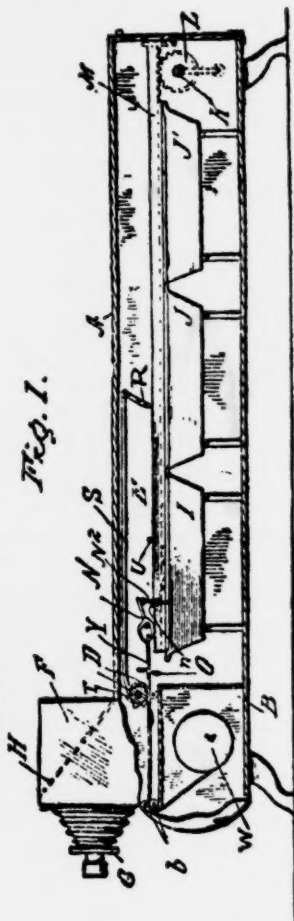
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Fig. 1.



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desired length, obviously only the free end will fall to the surface of the solution in the tank I, and by continuing the outward movement of the rack M, the specification declares, "the film is carried through the several tanks." The "clips" or clamps are set and released automatically and at the limit of the outward movement the film is released and falls into the tank J.' By reversing the turning of the pinions L the rack and clamps are returned inwardly to the camera, so that the operation, just detailed, may be repeated.

The Court of Claims carries into its findings of fact fourteen patents as illustrative of the prior art, and with this exhibit before us we fully agree with that court that the claim of invention of appellant must be restricted to the disclosed construction and operation of the mechanism for carrying the exposed section of film "through the developing and other solutions or liquids" after it leaves the camera.

In the description of the operation of the machine as we have just given it, there is no provision other than gravity for causing the free end of the film, when it is cut from the roll, to sink into the developing fluid, and the other end of it is held between the clamps, above the surface of the fluid, as it is drawn along from one tank to another. The Court of Claims found that under such conditions of operation all of the film would not be submerged with sufficient rapidity and uniformity to secure a proper and useful development of the image, and this conclusion is not seriously disputed. But the appellant contends that the required submergence may be obtained by oscillating the rack and clamps (and thereby the film) back and forth within the range of a few inches when the film is over the first tank, I, with the result that the free end of the film, first sinking into the fluid, is turned under and over and the exposed side of it wholly submerged and thereby developed.

In reply to this it is contended by the Government that the disclosures of the patent do not contain any suggestion of a short, reciprocating movement of the rack, such as is thus relied upon, and that the drawings provide for a construction of the machine which would be inoperative if such movement were resorted to.

Upon this subject the finding of the Court of Claims is, that the machine can be rendered operative only "by resorting to the new oscillating mode of operation evolved by the claimant . . . for submerging and developing the film," and that such mode of operation is not disclosed in the patent. On the contrary, it is especially found that:

"By the method contemplated and disclosed in the patent, the film with the exposed side up, held at one end by the clamps attached to the rack M and moving in a plane above the pans containing the developing and fixing fluids, is intended, by the outward movement of the rack, to be drawn successively through the developing and fixing fluids, the rack moving in one direction only through its entire course, the end of the film next the knife and away from the clamps falling, when severed by the knife, on the surface of the developer in the first pan and submerging by gravity."

Treating this finding by the court as an interpretation of the patent and therefore as a conclusion of law and subject to review, we are brought to the question whether the short, reciprocating movement of the rack, confessedly necessary to successful operation of the machine, is disclosed in the patent, as it must be to render it valid. Rev. Stats., § 4888.

The only description of the mode of operation of appellant's machine, and the statute requires that this must be the best mode known to the patentee (Rev. Stats., § 4888), is found in the specification and is as follows:

"In order to draw the films through the several compartments, I provide a mechanism consisting of a shaft K,

having toothed wheels L, which mesh with a rack M, the said rack being suitably guided in the compartment E, and being alternately reciprocated through the rotation of the shaft K, in opposite directions. When the shaft is turned to the right, the said rack will be projected from the compartment until the inner end thereof is nearly above the shaft K. When the shaft is rotated in the opposite direction, the said rack will, of course, be retracted and thrust into the compartment. It is the purpose of this invention that the said rack shall carry clips N, which are designed to clamp on the edges of the film Y and as the said rack is moved outwardly, the film is carried through the several tanks as indicated. The clips are automatically released and set through the contact with trips within the casing in the path of travel of said clips."

We agree with the Court of Claims that this language describes a movement of the rack M, carrying the clamps N, in one direction only—outwardly and progressively away from the camera—until the movement is completed and the film is released, and that the reciprocating movement referred to in the patent is the return of the mechanism for clamping and carrying the film to its initial position for the purpose of repeating the operation.

There is nothing in the disclosure or in the claims to suggest the arresting of the outward movement of the clamps as soon as the film is severed from the roll and the initiating thereupon of a short oscillating movement of the mechanism to and fro, until the film shall have been immersed in the developing liquid sufficiently to bring out the image photographed. It is very clear that no such operation can be derived from the disclosure in the patent, and we agree with the further finding of the Court of Claims that in order to permit "this new oscillating mode of operation evolved by the claimant" material changes would be required in the construction of the machine, from that disclosed in the description and drawings.

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The statutes, which are the source of all patent rights, provide that a valid patent may be granted for a new and useful machine, or for a new and useful improvement thereof (Rev. Stats., § 4886), but they require that every applicant for a patent shall file a written description of the manner and process of making and using his invention "in such full, clear, concise, and exact" terms as to enable any person skilled in the art to which it relates to make and construct it, and in case of a machine the description must disclose the best mode in which the inventor has contemplated the application of his discovery. Rev. Stats., § 4888.

Ever since *Grant v. Raymond*, 6 Pet. 218, 247, it has been consistently held that a correct and adequate description or disclosure of a claimed discovery (which, in the case of a machine, involves particularly the operation of it) is essential to the validity of a patent, for the reason that such a disclosure is necessary in order to give the public the benefit of the invention after the patent shall expire. The source of the power to grant patents, and the consideration for granting them, is the advantage which the public will derive from them, especially after the expiration of the patent monopoly, when the discoveries embodied in them shall become a part of the public stock of knowledge.

The application of these requirements of the law to our conclusion that the only form of construction of the machine and the only method of operation of it which are disclosed in the patent would not produce a sufficiently uniform and rapid development of the film to render it useful, must result in the approval of the judgment of the Court of Claims, that the patent is invalid and void, for the reason that it fails to disclose a practical and useful invention.

This result renders it unnecessary to consider the further conclusion of the court below that the use by the

United States of photo-copying machines of a type known as "Photostat," manufactured and sold under warrant of Letters Patent issued to J. S. Green, No. 1,001,019, would not have constituted an infringement of appellant's patent had it proved to be valid. However, for its bearing on future possible controversy, we add that the construction and relation of the two appliances, designed to produce the same result or product, have been fully considered and that we agree with the conclusion of the Court of Claims.

Affirmed.